



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,705	08/05/2003	Isao Tsuru	241188US0	6742

22850 7590 07/29/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,705

Applicant(s)

TSURU ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/3/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

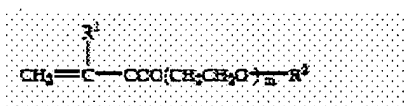
1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 6-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4-6 of copending Application No. 10/329,349. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

Copending 10/329,349 discloses water-based ink comprising aqueous dispersion of water-insoluble vinyl polymer containing a colorant wherein the water-insoluble vinyl polymer is prepared by polymerizing monomer (A) which is identical to presently claimed monomer B, monomer having a salt-forming group, monomer copolymerizable with monomer (A) and monomer having a salt-forming group, and monomer (D) of the formula:



which is identical to presently claimed monomer (A).

The difference between copending 10/329,349 and the present claimed invention is the requirement in the claims of (a) specific colorant and (b) amounts of monomers that comprise the water-insoluble vinyl polymer.

With respect to difference (a), copending 10/329,349 discloses the use of colorant, however, there is no explicit disclosure of Pigment Blue 15:4 as presently claimed.

Applicants' attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to

Art Unit: 1714

page 5, line 5-page 6, line 4 of copending 10/329,349 which discloses the use of colorant that is Pigment Blue 15:4. in order to prevent bronzing.

With respect to difference (b), copending 10/329,349 discloses water-insoluble vinyl polymer obtained from identical monomer as presently claimed, however, the copending claims are silent with respect to the amount of each monomer utilized.

Applicants' attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to col.11, line 20-22, col.13, lines 12-14, col.18, lines 13-15, and col.19, line 5-7 of copending 10/329,349 which discloses that monomer corresponding to presently claimed B, monomer having salt-forming group, copolymerizable monomer, and monomer corresponding to presently claimed monomer A are present in amounts of 5-45%, 3-40%, 15-87%, and 5-45%, respectively, in order to produce ink with good optical density, gloss, dispersion stability, jetting stability, and water resistance.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to (i) choose Pigment Blue 15:4 as the colorant in copending 10/329,349 to produce ink with no bronzing and (ii) obtain vinyl polymer utilizing 5-45% monomer corresponding to presently

Art Unit: 1714

claimed B, 3-40% monomer having salt-forming group, 15-87% copolymerizable monomer, and 5-45% monomer corresponding to presently claimed monomer A in order to produce ink with good optical density, gloss, dispersion stability, jetting stability, and water resistance, and thereby arrive at the present invention from the copending one.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1 and 6-10 are directed to an invention not patentably distinct from claims 1 and 4-6 of commonly assigned 10/329,349. Specifically, although the conflicting claims are not identical they are not patentably distinct in light of the explanation given in paragraph 2 above.

4. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302).

Commonly assigned 10/329,349, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly

assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

5. Claims 1 and 6-10 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/329,349 which has a common assignee/inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. For an explanation of the rejection, see paragraph 2 above.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1113051.

EP 1113051 discloses water-based ink comprising aqueous dispersion of water-insoluble vinyl polymer particles containing pigment including Pigment Blue 15:4 wherein the polymer is a graft copolymer having acrylic side chain, salt-forming group, and 10-35% nonionic side chain wherein the polymer is obtained from (a) 1-40% (meth)acrylate macromer, (b) salt-forming group containing monomer, and (c) monomer copolymerizable with these monomers such as styrene monomer and styrene macromer with polymerizable functional group wherein at least part of monomer (c) is a monomer of the formula:



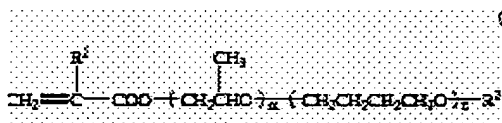
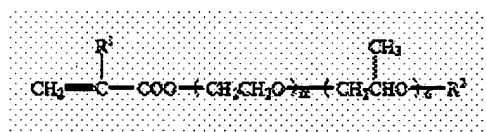
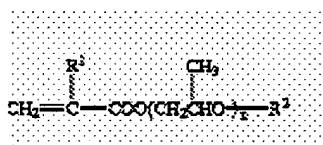
such as methoxy polypropylene glycol (meth)acrylate, methoxy (ethylene glycol-propylene glycol) (meth)acrylate, and polyethylene glycol (meth)acrylate wherein monomer (c) is used in mixture of at least two kinds. It is disclosed that the monomers (b) and (c) are present in amount of 60-99% (paragraphs 1, 13, 15, 29, 33-34, 38, 49-52, 54, 72-76, 79, 81-84, 87-88, and 102).

In light of the above, it is clear that EP 1113051 anticipates the present claims.

Art Unit: 1714

8. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizushima et al. (U.S. 2003/0144378).

Mizushima et al. disclose water-based ink comprising aqueous dispersion of water-insoluble vinyl polymer containing a colorant that includes Pigment Blue 15:4 wherein the vinyl polymer is obtained from 5-45% of at least one monomer A of the formula



where R^1 is hydrogen or methyl group, R^2 is hydrogen, $\text{C}_1\text{-C}_{20}$ alkyl group, or an alkyl phenyl group, and n is 1-30, 3-40% monomer having salt-forming group, 15-87% monomer copolymerizable with monomer A and monomer having salt-forming group such a styrene or styrene macromer having polymerizable functional group at one end, and 5-45% monomer of the formula:



where R^1 and R^2 are defined above (paragraphs 2, 12-19, 24, 27-28, 44-45, 48, 55-57, 60, 71-72, 75-78, 104, 107, 109, claim 2).

In light of the above, it is clear that Mizushima et al. anticipates the present claims.

9. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabayashi et al. (U.S. 6,074,467) or Mishina et al. (U.S. 6,511,534).

Tabayashi et al. disclose water-based ink comprising aqueous dispersion of water-insoluble vinyl polymer containing Pigment Blue 15:4 as colorant (col.1, lines 6-8, col.6, lines 8-12, col.7, line 59-col.8, line 7, col.10, lines 35-39, and col.11, lines 6-10).

Alternatively, Mishina et al. disclose water-based ink comprising aqueous dispersion of water-insoluble vinyl polymer, i.e. (meth)acrylate ester polymer, containing Pigment Blue 15:4 as colorant (col.2, lines 51-58, col.5, lines 51-64, and col.6, line 35).

In light of the above, it is clear that Tabayashi et al. or Mishina et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1714

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (U.S. 6,740,690) in view of Tabayashi et al. (U.S. 6,074,467).

Nakano et al. disclose water-based ink comprising aqueous dispersion of water-insoluble polymer containing phthalocyanine pigment wherein the polymer is obtained from 1-50% salt-forming group containing monomer, 1-25% macromer such as styrene macromer having polymerizable functional group, 5-50% monomer of the formula:



where R^1 is hydrogen or $\text{C}_1\text{-C}_4$ alkyl, R^2O includes alkylene oxide such as ethylene oxide, propylene oxide, tetramethylene oxide, and mixtures thereof, and R^3 is hydrogen or hydrocarbon group having 1 to 30 carbon atoms wherein the monomer is, for instance, methoxypolypropylene glycol (meth)acrylate, 5-40% hydroxyl group containing monomer such as polyethylene glycol (meth)acrylate or polyethylene glycol-polypropylene glycol (meth)acrylate, and monomer copolymerizable with these monomer such as (meth)acrylates or styrene (col.1, lines 7-10, col.4, lines 45-55, col.5, lines 40-53, col.6, line 50, col.8, line 1-col.10, line 35, and col.11, lines 41-43).

The difference between Nakano et al. and the present claimed invention is the requirement in the claims of specific pigment.

Nakano et al. disclose the use of phthalocyanine pigment, however, there is no explicit disclosure of Pigment Blue 15:4 as presently claimed.

Tabayashi et al., which is drawn to ink comprising aqueous dispersion of water-insoluble vinyl polymer containing pigment, disclose the use of Pigment Blue 15:4 in order to produce good color tone and waterproof properties (col.1, lines 1-10 and 35-37).

In light of the motivation for using Pigment Blue 15:4 disclosed by Tabayashi et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use Pigment Blue 15:4 as the pigment in Nakano et al. in order to produce ink with good color tone and waterproof property, and thereby arrive at the claimed invention.

Art Unit: 1714

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyabayashi et al. (U.S. 6,602,333) disclose microencapsulated pigment coated with polymer wherein the pigment includes Pigment Blue 15:4.


Nakamura et al. (U.S. 2003/0195274) disclose microencapsulated pigment coated with polymer wherein the pigment includes Pigment Blue 15:4.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CS
7/16/05


Callie E. Shosho
Primary Examiner
Art Unit 1714